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| EXAMINER | |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/829,490 | CHEN ET AL. | |
| | Examiner | Art Unit | |
| | FONYA LONG | 3689 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *22 October 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-5,7-10,13,16,17 and 19-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-10,13,16,17 and 19-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

This communication is a Non-Final Office Action rejection on the merits in response to communications received on October 22, 2009. Claims 1-5, 7-10, 13, 16-17, and 19-32 have been amended. Claims 6, 11-12, 14-15, and 18 have been cancelled. Claims 1-5, 7-10, 13, 16-17, and 19-32 are currently pending and have been addressed below.

### *Continued Examination Under 37 CFR 1.114*

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 22, 2009 has been entered.

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 20-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 20-31 recited a "computer readable medium". However, the written description fails to recite a computer readable medium which comprises computer readable instructions. It is unclear what type of structure is being claimed to be a computer readable medium.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 20-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**As per Claims 20-31**, the claims are directed to neither a "manufacture" nor a "process", but rather embrace or overlap two different statutory classes of invention. Claim 20 discloses a computer-readable medium and a method. "A claim of this type is precluded by the express language of 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only." See MPEP §2173.05(p) II or *Parte Lyell*, 17 USPQ2d 1548 (B.P.A.I., 1990).

**As per Claim 32**, as clarified in Bilski, the test for a method claim is whether the claimed method is (1) tied to a particular machine or apparatus, or (2) transforms a particular article to a different state or thing.

There are two corollaries to the machine-or-transformation test. First, a mere field-of-use limitation is generally insufficient to render an otherwise ineligible method

claim patent-eligible. This means the machine or transformation must impose meaningful limits on the method claim's scope to pass the test. Second, insignificant extra-solution activity will not transform an unpatentable principle into a patentable process. This means reciting a specific machine or a particular transformation of a specific article in an insignificant step, such as data gathering or outputting, is not sufficient to pass the test.

Claim 32 recites a method wherein a search is conducted utilizing databases. A database is not considered a particular machine or apparatus. Claim 32 also fails to recite a transformation being conducted that transforms a particular article to a different state or thing.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-5, 7-8, 13, 16, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (6,212,518) in view of Mir (6,938,081) and in further view of Shapiro et al. (7,434,048).

**As per Claim 1**, Yoshida et al. discloses a system comprising:

an input/output device coupled to a user interface configured to accept a predefined search scope and a predefined search scheme (Col. 6, Lines 24-28, via user

interface that accepts a search request from a searcher for information and displays a search result to the information searcher);

a memory unit including a plurality of process documents and a plurality of technology files (Col. 22, Lines 17-30, discloses a memory);

a processor (Col. 22, Lines 17-30, via an information processor (a computer)), wherein the processor includes:

an extraction module, responsive to the user interface, configured to search the plurality of process documents and the plurality of technology files (Col. 3, Lines 61-63, via a search unit that searches the databases in response to the search request sent from the user terminal), wherein the extraction module determines at least one document within the predefined search scope and the predefined search scheme, wherein the at least one document is one of the plurality of process documents or one of the plurality of technology files (Col. 3, Lines 61-63, via the search unit determines a search result based on the search request (i.e. search scope and search scheme) received from the user terminal)); and

a display monitor operable to provide the impact to the customer to a user as a visual depiction (Col. 6, Lines 24-28, via the user terminal displaying a search result to the information searcher).

However, Yoshida et al. fails to explicitly disclose determining a customer who has accessed the at least one document; and analyzing information and evaluating for an impact to the customer by a revision of the technology process.

Mir discloses a method and system for managing network infrastructure change with the concept of an estimation module configured to analyze the information of the customer and evaluate for an impact to the customer by a revision of the technology process (Col. 2, Lines 16-32, discloses based on rules provided by the change category the affected entities are determined that should be notified of a change, wherein the entities include (Col. 7, Lines 31-50) potentially select customers).

Therefore, from the teaching of Mir, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method of retrieval of data from related databases of Yoshida et al. to include and analyzing information and evaluating for an impact to the customer by a revision of the technology process as taught by Mir in order to aid in gracefully carrying out a change by providing awareness to those impacted by the change.

Shapiro et al. discloses controlling access to electronic documents with the concept of determining who has accessed a document (Col. 4, Lines 43-65, via creating an audit trail which records when a document was accessed, from where, and by whom).

Therefore, from the teaching of Shapiro et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Yoshida et al. and Mir combination to include determining who has accessed a document as taught by Shapiro et al. in order to aid in monitoring and controlling access to documents and identifying the responsible parties for any modifications that may have been made to the documents.

Examiner Notes: The type of documents and files being stored and search hold little patentable weight in the system claim. Examiner asserts the function of searching and storing documents and files would be performed the same by the system regardless of the type of documents and files.

**As per Claim 2**, Yoshida et al. discloses a predefined search scope (Col. 7, Line 26-Col. 8, Line 63, discloses having predefined search categories (i.e. search scope)).

Examiner asserts that the predefined search scope including a period of time, a type of technology, and a physical region is considered non-functional descriptive material. The search scope being a period of time, a type of technology, and physical region does not change the function of performing the search using a predefined search scope. Examiner asserts that Yoshida et al. is fully capable of performing a search using a predefined search scope including a period of time, a type of technology, and a physical region.

**As per Claim 3**, Yoshida et al. discloses a predefined search scheme (Col. 7, Lines 46-67, via having a predefined search sequence (i.e. search scheme)).

Examiner asserts that the predefined search scheme including document title, document number, vendor, maker, and end customer is considered non-functional descriptive material. The search scheme being document title, document number, vendor, maker, and end customer does not change the function of performing the search using a predefined search scheme. Examiner asserts that the Oppedahl et al. and Yoshida et al. combination is fully capable of performing a search using a

predefined search scheme including document title, document number, vendor, maker, and end customer.

**As per Claim 4**, the Yoshida et al., Mir, and Shapiro et al. combination discloses the claimed invention as applied to Claim 3, above. However, the combination fails to explicitly disclose the vendor comprising one of electronic design automation (EDA) vendor, a chip service company, a library, and an intellectual property (IP) vendor.

Examiner asserts that the vendor comprising one of electronic design automation (EDA) vendor, a chip service company, a library, and an intellectual property (IP) vendor is considered non-functional descriptive material. The vendor being one of electronic design automation (EDA) vendor, a chip service company, a library, and an intellectual property (IP) vendor does not change the function of performing a search using a predefined search scheme. Examiner asserts that the Yoshida et al., Mir, and Shapiro et al. combination is fully capable of having a vendor be one of electronic design automation (EDA) vendor, a chip service company, a library, and an intellectual property (IP) vendor.

**As per Claim 5**, the Yoshida et al., Mir, and Shapiro et al. combination discloses the claimed invention as applied to Claim 3, above. However, the combination fails to explicitly disclose the maker comprising one of a photomask maker, a wafer manufacturer, a testing facility, and a packaging facility.

Examiner asserts that the maker comprising one of a photomask maker, a wafer manufacturer, a testing facility, and a packaging facility is considered non-functional descriptive material. The maker being one of a photomask maker, a wafer

manufacturer, a testing facility, and a packaging facility does not change the function of performing a search using a predefined search scheme. Examiner asserts that the Yoshida et al., Mir, and Shapiro et al. combination is fully capable of having a maker be one of a photomask maker, a wafer manufacturer, a testing facility, and a packaging facility.

**As per Claims 7-8**, Yoshida et al. discloses a database comprising documents (Claim 1, discloses a plurality of databases storing information (i.e. documents). However, Yoshida et al. fails to explicitly disclose documents being at least a process document, and at least a technical file.

Examiner asserts that the documents being at least a process document and a technical file are considered non-functional descriptive material. The type of documents being stored in a database does not change the function of the claimed invention. Examiner asserts the Yoshida et al. combination is fully capable of a utilizing process documents and technical files.

**As per Claim 13**, Yoshida et al. discloses searching relevant documents according to the predefined search scheme (Col. 7, Line 40-Col. 8, Line 12, discloses searching for relevant information (i.e. documents) based on a predefined search sequence (i.e. search scheme)).

**As per Claim 16**, Yoshida et al. discloses the claimed invention as applied to Claim 1, above. However, Yoshida et al. fails to explicitly disclose providing a list of a plurality of customers.

Mir discloses a system and method for managing changes to a process with the concept of providing a list of a plurality of customers who are impacted by the revision of the technology process (Col. 12, Lines 23-30, via notification section provides a listing a impacted customers that should be notified of the change).

Therefore, from the teaching of Mir, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method of retrieval of data from related databases of Yoshida et al. to include providing a list of customers as taught by Mir in order to aid in gracefully carrying out a change by providing awareness to those impacted by the change.

**As per Claim 17**, Yoshida et al. discloses the claimed invention as applied to Claim 16, above. However, Yoshida et al. fails to explicitly disclose providing a list of customers.

Mir discloses a system and method for managing changes to a process with the concept of providing a list of customer who are impacted by the revision of the technology process according to a quantitative criteria (Col. 12, Lines 23-30, via notification section provides a listing of impacted customers that should be notified of the change).

Therefore, from the teaching of Mir, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method of retrieval of data from related databases of Yoshida et al. to include providing a list of customers as taught by Mir in order to aid in gracefully carrying out a change by providing awareness to those impacted by the change.

**As per Claim 19**, Yoshida et al. discloses the claimed invention as applied to Claim 1, above. However, the combination fails to explicitly disclose providing a suggestion for communication with relevant customers, vendors, and makers for the revision.

Mir discloses a system and method for managing changes to a process with the concept of providing a suggestion for a communication with relevant customers, vendors, and makers for the revision of the technology process (Abstract, discloses providing rules (i.e. suggestions) about how the affected entities should be notified of the change).

Therefore, from the teaching of Mir, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method of retrieval of data from related databases of Yoshida et al. to include providing a suggestion for a communication with relevant customers, vendors, and makers for the revision as taught by Mir in order to aid in gracefully carrying out a change by providing awareness to those impacted by the change.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (6,212,518) in view of Mir (6,938,081) and in further view of Shapiro et al. (7,434,048) and Kuo (US 2005/0021165).

**As per Claim 9**, the Yoshida et al., Mir, and Shapiro et al. combination discloses the claimed invention as applied to Claim 1, above. However, the combination fails to explicitly disclose the system comprising a virtual fab.

Kuo discloses an inter-fab mask process management system with the concept of a virtual fab that is a network entity (Abstract; Fig. 1, 2, and 3; [00919], discloses a virtual fab which is a plurality of entities, each entity associated with an internal process to a semiconductor fab or an external process via a network).

Therefore, from the teaching of Kuo, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Yoshida et al., Mir, and Shapiro et al. combination to include a virtual fab as taught by Kuo in order to aid in managing documentation for a semiconductor manufacturing environment.

**As per Claim 10**, the Yoshida et al., Mir, and Shapiro et al. combination discloses the claimed invention as applied to Claim 9, above However, the combination fails to explicitly disclose the virtual fab being connected to at least one of a customer, a vendor, a manufacturer, and a design group.

Kuo discloses an inter-fab mask process management system with the concept of a virtual fab being connected to at least one of a customer, a vendor, a manufacturer, and a design group (Abstract; Fig. 1, 2, and 3; [0022], discloses the virtual fab being connected to a customer).

Therefore, from the teaching of Kuo, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Yoshida et al., Mir, and Shapiro et al. combination to include a virtual fab as taught by Kuo in order to aid in managing documentation for a semiconductor manufacturing environment.

8. Claims 20-23 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (6,212,518) in view of Shapiro et al. (7,434,048).

**As per Claim 20**, Yoshida et al. discloses a computer readable medium (Col. 23, Lines 1-7, via a computer-readable media), comprising computer readable instructions, that when executed by a processor, performing a method, the method comprising:

receiving a search scope and a search scheme from a user interface (Col. 6, Lines 24-38, via receiving a search request from a user interface);

searching, according to the search scope and the search scheme, a database to determine a customer impacted by the revision (Col. 3, Lines 61-63, discloses searching a database in response to the search request received. Examiner asserts that the fact that the search is being conducted to determine a customer impacted by the revision is considered intended use. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).); and

providing a search result to a user as a visual depiction of the search result using a display monitor (Col. 6, Lines 24-28, via the user terminal displaying a search result to the information searcher).

However, Yoshida et al. fails to explicitly disclose determining who has accessed a document of the database.

Shapiro et al. discloses controlling access to electronic documents with the concept of determining who has accessed a document (Col. 4, Lines 43-65, via creating an audit trail which records when a document was accessed, from where, and by whom).

Therefore, from the teaching of Shapiro et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method of retrieval of data from related databases of Yoshida et al. to include determining who has accessed a document as taught by Shapiro et al. in order to aid in monitoring and controlling access to documents and identifying the responsible parties for any modifications that may have been made to the documents.

Examiner Notes: The fact that the database is a microelectronics fabrication design technical documents database holds little patentable weight in the claim. Examiner asserts the method of storing and searching documents would be performed the same regardless of the type of database.

**As per Claim 21**, Yoshida et al. discloses a search scope (Col. 7, Line 26-Col. 8, Line 63, discloses having search categories (i.e. search scope)).

Examiner asserts that the search scope including a period of time, a type of technology, and a physical region is considered non-functional descriptive material. The search scope being a period of time, a type of technology, and physical region does not change the function of performing the search using a search scope. Examiner asserts that Yoshida et al. is fully capable of performing a search using a search scope including a period of time, a type of technology, and a physical region.

**As per Claim 22**, Yoshida et al. discloses a search scheme (Col. 7, Lines 46-67, via having a predefined search sequence (i.e. search scheme)).

Examiner asserts that the search scheme including document title, document number, vendor, maker, and end customer is considered non-functional descriptive

material. The search scheme being document title, document number, vendor, maker, and end customer does not change the function of performing the search using a search scheme. Examiner asserts that Yoshida et al. combination is fully capable of performing a search using a search scheme including document title, document number, vendor, maker, and end customer.

**As per Claim 23**, the Yoshida et al. and Shapiro et al. combination discloses the claimed invention as applied to Claim 21, above. However, the combination fails to explicitly disclose the type of technology.

Examiner asserts that the type of technology including 0.25 μm and above, 0.25 μm to 0.15 μm, 0.15 μm to 0.09 μm, and below 0.09 μm is considered non-functional descriptive material. The type of technology does not change the function of performing a search. Examiner asserts that the Yoshida et al. and Shapiro et al. combination is fully capable of performing a search with information related to the technology process, wherein the technology includes 0.25 μm and above, 0.25 μm to 0.15 μm, 0.15 μm to 0.09 μm, and below 0.09 μm.

**As per Claim 25**, the Yoshida et al. and Shapiro et al. combination discloses the claimed invention as applied to Claim 22, above. However, the combination fails to explicitly disclose a type of vendor.

Examiner asserts that the vendor comprising one of electronic design automation (EDA) vendor, a chip service company, a library, and an intellectual property (IP) vendor is considered non-functional descriptive material. The vendor being one of electronic design automation (EDA) vendor, a chip service company, a library, and an intellectual

property (IP) vendor does not change the function of performing a search using a predefined search scheme. Examiner asserts that the Yoshida et al. and Shapiro et al. combination is fully capable of having a vendor be one of electronic design automation (EDA) vendor, a chip service company, a library, and an intellectual property (IP) vendor.

**As per Claim 26**, the Yoshida et al. and Shapiro et al. combination discloses the claimed invention as applied to Claim 22, above. However, the combination fails to explicitly disclose a type of maker.

Examiner asserts that the maker comprising one of a photomask maker, a wafer manufacturer, a testing facility, and a packaging facility is considered non-functional descriptive material. The maker being one of a photomask maker, a wafer manufacturer, a testing facility, and a packaging facility does not change the function of performing a search using a predefined search scheme. Examiner asserts that the Yoshida et al. and Shapiro et al. combination is fully capable of having a maker be one of a photomask maker, a wafer manufacturer, a testing facility, and a packaging facility.

**As per Claim 27**, the Yoshida et al. and Shapiro et al. combination discloses the claimed invention as applied to Claim 20, above. However, the combination fails to explicitly disclose the design technical documents database comprising one of design rule check database, layout versus schematic database, and RC extraction database.

Examiner asserts that the type of database and the type of data being stored on the database is considered non-functional descriptive material. The type of database and the type of data being stored on the database does not change the claimed function

of performing a search. Examiner asserts that the Yoshida et al. and Shapiro et al. combination is fully capable of utilizing a design database comprising one of design rule check database, layout versus schematic database, and RC extraction database.

9. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (6,212,518) in view of Shapiro et al. (7,434,048) and in further view of Oppedahl et al. (6,789,092).

As per Claim 24, the Yoshida et al. and Shapiro et al. combination discloses the claimed invention as applied to Claim 21, above. However, the combination fails to explicitly disclose performing a search for a period of time.

Oppedahl et al. discloses a status monitoring system with the concept of performing a search for a period of time (Col. 2, Line 65-Col. 3, Line 3, discloses a search for updates being performed daily, weekly, or monthly).

Examiner asserts it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the search by performed quarterly (i.e. 3 months), bi-yearly (i.e. 6 months), or yearly (i.e. 12 months).

Therefore, from the teaching of Oppedahl et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Yoshida et al. and Shapiro et al. combination to include performing a search for a period of time as taught by Oppedahl et al. in order to aid in retrieving current up-to-data information.

10. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (6,212,518) in view of Shapiro et al. (7,434,048) and in further view of Kuo (US 2005/0021165).

**As per Claims 28 and 29**, the Yoshida et al. and Shapiro et al. combination discloses the claimed invention as applied to Claim 20, above. However, the combination fails to explicitly disclose a virtual fab that is a network entity.

Kuo discloses an inter-fab mask process management system with the concept of a virtual fab that is a network entity (Abstract; Fig. 1, 2, and 3; [00919], discloses a virtual fab which is a plurality of entities, each entity associated with an internal process to a semiconductor fab or an external process via a network).

Therefore, from the teaching of Kuo, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Yoshida et al. and Shapiro et al. combination to include a virtual fab as taught by Kuo in order to aid in managing documentation for a semiconductor manufacturing environment.

**As per Claim 30**, the Yoshida et al. and Shapiro et al. combination discloses the claimed invention as applied to Claim 29, above. However, the combination fails to explicitly disclose a virtual fab being connected to at least a customer, a vendor, a manufacturer, and a design lab.

Kuo discloses an inter-fab mask process management system with the concept of a virtual fab being connected to at least one of a customer, a vendor, a manufacturer, and a design group (Abstract; Fig. 1, 2, and 3; [0022], discloses the virtual fab being connected to a customer).

Therefore, from the teaching of Kuo, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Yoshida et al.

and Shapiro et al. combination to include a virtual fab as taught by Kuo in order to aid in managing documentation for a semiconductor manufacturing environment.

11. Claims 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (6,212,518) in view of Shapiro et al. (7,434,048) and in further view of Mir (6,938,081).

**As per Claim 31**, the Yoshida et al. and Shapiro et al. combination discloses the claimed invention as applied to Claim 20, above. However, the combination fails to explicitly disclose specifying a change of process and verifying validity of the change of process.

Mir discloses a system and method for managing changes to a process with the concept of specifying a change of process wherein the change of process is associated with a technical document (Col. 7, Lines 1-20, discloses specifying a change of process via opening a change ticket and writing the accompanying change plan which is includes information on the impact of the change, or who is involved in the change); and verifying validity of the change of process according to a set of predefined rules (Col. 4, Lines 22-67, discloses approving or disapproving (i.e. verifying validity) of the change plan that comprises a set of instructions on how to carry out the change).

Therefore, from the teaching of Mir, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Yoshida et al. and Shapiro et al. combination to include specifying a change of process and verifying validity of the change of process as taught by Mir in order to aid in gracefully carrying out a change by providing awareness to those impacted by the change.

12. Claims 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mir (6,938,081) in view of Yoshida et al. (6,212,518).

**As per Claim 32**, Mir discloses a method comprising:

specifying a change of process (Abstract, via creating a change plan that comprises instructions that meet minimum requirements about how the change is to be performed. Examiner asserts the type of change and the impact of the change holds little patentable weight in the method claim. The type of change and impact of the change does not affect the function a specifying the change. Examiner asserts the method step of specifying a change would be performed the same regardless of the type of change and the impact of the change.);

verifying validity of the change of process according to a set of predefined rules (Col. 4, Lines 22-67, discloses approving or disapproving (i.e. verifying validity) of the change plan that comprises a set of instruction on how to carry out the change);

determining an impact to a customer (Col. 2, Lines 16-32, discloses based on rules provided by the change category the affected entities are determined that should be notified of a change, wherein the entities include (Col. 7, Lines 31-50) potentially select customers); and

making the change in the fabrication process (Col. 2, Lines 33-41, discloses implementing a change).

However, Mir fails to explicitly disclose providing a search scope and a search scheme; and implementing a search of a plurality of databases according to the search scope and the search scheme.

Yoshida et al. discloses a system and method for retrieval of data from related databases with the concept of providing a search scope (Col. 7, Line 26-Col. 8, Line 63, discloses having search categories (i.e. search scope)); providing a search scheme (Col. 7, Lines 46-67, via having a search sequence (i.e. search scheme)); and implementing a search of a plurality of databases according to the search scope and the search scheme (Abstract; Col. 18, Lines 41-53, discloses conducting a search of a plurality of databases based the search categories and the search sequence).

Therefore, from the teaching of Yoshida et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system for managing network infrastructure change of Mir to include providing a search scope and a search scheme; and implementing a search of a plurality of databases according to the search scope and the search scheme as taught by Yoshida et al. in order to aid users in locating change plans and procedures stored in a database.

***Response to Arguments***

13. Applicant's arguments filed October 22, 2009 have been fully considered but they are not persuasive.

With regards to Applicant's argument pertaining to the 101 rejection for Claim 32, Examiner respectfully disagrees. Examiner asserts claim 32 recites a method wherein a search is conducted utilizing databases. A database is not considered a particular machine or apparatus. Claim 32 also fails to recite a transformation being conducted that transforms a particular article to a different state or thing.

With regards to Applicant's arguments pertaining to the 103 rejections, Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FONYA LONG whose telephone number is (571)270-5096. The examiner can normally be reached on Mon-Thurs. 7:30am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on (571) 272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. L./
Examiner, Art Unit 3689

/Janice A. Mooneyham/
Supervisory Patent Examiner, Art Unit 3689